



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,287	01/25/2005	Hubert Sjoerd Blaauw	NL 020702	1506

24737 7590 01/12/2010
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

ROE, JESSEE RANDALL

ART UNIT	PAPER NUMBER
----------	--------------

1793

MAIL DATE	DELIVERY MODE
-----------	---------------

01/12/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,287	Applicant(s) BLAAUW ET AL.	
	Examiner JESSEE ROE	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,8-12 and 14-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,8-12 and 19-28 is/are allowed.
- 6) ☒ Claim(s) 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

Claims 1, 3-4, 8-12 and 14-28 are pending wherein claim 1 is amended, claims 14-28 are new and claims 2, 5-7 and 13 are canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkash (High-Strength Maraging Steels) in view of Laurence et al. (US 5,244,375).

In regards to claim 14, Perkash discloses (page 423, paragraph 9 – page 424) maraging stainless steels in the form of forged pieces, rolled sections, thin and thick sheet (plate), strip, and pipe with applications in manufacturing aircraft, rockets, refrigeration, shipbuilding, and tools such as punches and dies (which would include cutting devices). However, Perkash does not specify that the maraging stainless steel would be plasma-nitrided at a temperature below 500°C.

Laurence et al. ('375) discloses plasma ion nitriding iron-based materials by plasma ion nitriding at temperatures substantially below 1000°F (538°C) in order to improve the wear resistance of the iron-based materials (col. 4, lines 1-30 and claims 1 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the maraging stainless steel, as disclosed by Perkash, in the plasma nitriding process, as disclosed by Laurence et al. ('375), in order to improve the wear resistance of the iron-based material (maraging stainless steel), as disclosed by Laurence et al. ('375) (col. 4, lines 1-30 and claims 1 and 5).

In regards to claims 17-18, Laurence et al. ('375) discloses processing times that would span 20-48 hours at temperatures substantially below 1000°F (538°C) in order to improve the wear resistance (Table A), which would be substantially similar to the processing times of the instant invention. Therefore, precipitation hardening in addition to nitriding would be expected. MPEP 2112.01 I.

In regards to claims 15-16 and 18, Laurence et al. ('375) discloses that the plasma ion nitriding would take place at temperatures substantially below 1000°F (538°C) (col. 4, lines 1-30 and claims 1 and 5), which overlaps the range of between 300°C and 380°C as in claims 15 and 18 and the range of between 370°C and 380°C as in claim 16. Where principal difference between claimed process and that taught by reference is a temperature difference, it is incumbent upon applicants to establish criticality of that difference. Ex parte Khusid, Bezgodova, and Ruben, 174 USPQ 59 (Bd. Pat. App. & Int. 1971).

Allowable Subject Matter

Claims 1, 3-4 and 8-12 are allowed.

Art Unit: 1793

In regards to claim 1, the prior art does not, either alone or in combination, disclose or adequately suggest the steps of forming a maraging stainless steel into a shaver blade before carrying out plasma nitriding at a temperature within the range of 300°C to 380°C. The previously applied art of Perkash in view of Laurence et al. ('375) does not recite the claimed sequence of processing steps or the formation of a maraging stainless steel shaver blade.

Claims 19-23 are allowed.

In regards to claim 19, the prior art does not, either alone or in combination, disclose or adequately suggest the steps of forming a maraging stainless steel into a shaver blade before carrying out plasma nitriding at a temperature below 500°C. The previously applied art of Perkash in view of Laurence et al. ('375) does not recite the claimed sequence of processing steps or the formation of a maraging stainless steel shaver blade.

Claims 24-28 are allowed.

In regards to claim 24, the prior art does not, either alone or in combination, disclose or adequately suggest the steps of forming a maraging stainless steel into a shaver cap before carrying out plasma nitriding at a temperature below 500°C. The previously applied art of Perkash in view of Laurence et al. ('375) does not recite the claimed sequence of processing steps or the formation of a maraging stainless steel shaver cap.

Response to Arguments

Applicant's arguments with respect to claims 14-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessee Roe whose telephone number is (571)272-5938. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:00 AM - 4:00 PM.

Art Unit: 1793

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art
Unit 1793

/JR/